



THOMAS G. NEWMAN,  
EDITOR.

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## EDITORIAL BUZZINGS.

The "North American" Convention will be in session by the time this paper is in the hands of its readers. We expect to give a report of the proceedings in our next issue.

We Regret to learn that Mr. W. Z. Hutchinson has been "on the sick list" again. He is now improving, however, and hopes to have fully recovered in a few days.

The Appeal of the Arkadelphia case is to come before the Supreme Court at Little Rock, Ark., this month. The Hon. S. W. Williams has the case in charge for the Union, and we confidently hope that it will sustain the verdict of the lower court, and declare that the pursuit of bee-keeping is not a nuisance. Thousands anxiously await the result of the trial.

Dr. Morrison, of Oxford, Pa., was very successful at the late Pennsylvania State Fair, in his competition in the Apian Department, having secured five first prizes on his bees. First on Carniolan and Italian bees, and on queens, queen-rearing and queen-cells.

The Wintering of Bees is the most important subject now before us—it is thoroughly a seasonable topic, because a plan must be decided upon and put into practice in a very short time. We advise every bee-keeper to read carefully the article on pages 647 and 648, written by Mr. G. R. Pierce, entitled, "The Result of Experiments Made to Discover the Cause of Bee-Diarrhea." Its careful perusal will pay for the time devoted to it, even though you may not agree with all its conclusions.

**Pleurisy Root.**—Mr. James Heddon, on page 600, mentions the fact that this plant had "shared the fate" of the clover and buckwheat of this season, at least to a certain extent. Now in *Gleanings* we find, as a later report, the following, stating that it has yielded better than any other plant:

This year the pleurisy plant is the best honey yielder of them all. It has spread until there is no dearth and robbing, when basswood closes. We see that the quality of the honey is excellent, and the color about the same as white clover. It is standing full of seeds this season, and we believe that in the near future, it will be the best surplus honey-producing plant we have in this locality, basswood and clover not excepted.

**A Change of Time** for the payment of dues and the election of officers of the National Bee-Keepers' Union was proposed on page 579. It was thought that it would be a much better time to have it come in January instead of July, and as we have several cases on hand with a call for money to carry them to a successful issue, it was further proposed that the next annual dues be called for next January, for the year 1889. Several have voted, and all so far have been in favor of the change. Let every member of the Union send a postal card to the Manager, and say whether he favors the change or not. Be free to vote, and vote at once.

**If you Have Surplus Honey** ready to take off from the hive, do so at once. Honey is much better looking when just completed than it will ever be after. By leaving it on the hive the bees thicken the cappings, and by traveling over the dark brood-combs and then over the honey, it becomes soiled, and has a darker appearance. The propolis nuisance should also be remembered. The sooner the honey is removed the less of this will there be to scrape off from the sections.—*Colman's Rural.*

**At the Indiana State Fair** Mr. G. K. Hubbard captured all the premiums but one; the exception being that of a collection of honey plants, which was awarded to Mr. J. S. Russell, of Zionsville, Ind. Mr. Hubbard took the other eight premiums as follows: On queens, apian supplies; comb foundation for brood-chamber and surplus, honey and wax extractors, sections, and crates for honey. By the report we should think that no honey was exhibited.

**When we Consider** that pure honey is the very essence of flowers and plants, in which, we are told, there is a remedy for every disease, surely we cannot doubt the happy combination of honey as medicine. The Scripture tells us, in many passages, of the wonderful efficacy of honey as food and medicine. As the treatment of disease becomes more and more rational so will the value of honey as a medicine become more and more apparent.—*Exchange.*

**Uncle Sam's National Flower.**—Upon the selection of this, the Lewiston, Maine, *Journal* remarks as follows:

What shall be the National flower of the United States? This question was first brought before the public at the recent session of the Society of American Florists in New York. Some one proposes that the golden-rod shall be the chosen emblem of nationality. The claims made for this flower are that it is national in the wide range of its growth, accommodating itself to almost any circumstances, in the pasture, in the meadow, in the roadside, or by the stream.

**Mr. Turner's "Outline Studies in the History of the Northwest,"** (Charles H. Kerr & Co., Chicago), is a timely publication in this anniversary year of the settlement of the Northwest. It is prepared for the uses of study clubs, and arranged to occupy fifteen meetings, each meeting being devoted to a particular division of the study, and three special topics being provided for each. Mailed to any address for 10 cents by the publishers.

**Reproduction in the Honey Bee** is the title of a pamphlet just received. It is an address delivered before the Pennsylvania State Board of Agriculture, by Prof. G. G. Groff, acting President of the Bucknell University, and apiarist of the State Board of Agriculture. It is a very interesting address, and we shall copy a portion of it as soon as we can find room for it.

**Nature's Way.**—This is the title of a 15-cent pamphlet entitled, "G. M. Doolittle's Method of Rearing Queens"—which is called "The nearest approach to Nature's way yet devised." It describes his method, and points out its advantages. For sale at this office.

**Wax** is a substance secreted by the bees, and is analogous to the fat of higher animals. To produce a single pound of wax, bees must consume from 15 to 20 pounds of honey. The expensive substance is used by the thrifty little insects with the greatest economy. The thickness of the cell-walls in a new comb is said to be only 1-180th of an inch.—*The Millstone.*

**Saved by Bees.**—An exchange says: "Once when the Turks had begun to scale the wall of a church in Transylvania, a girl's wit saved the people from capture and death. Behind the church was a little garden, and in it a dozen bee-hives which it was the girl's duty to care for. Seizing a hive she ran up on the fortress wall and hurled it down among the enemy. Again and again she repeated the process until ten or more swarms of maddened bees were stinging the Turks. They were blinded and dismayed, and, unable to cope with the insect foe, beat a hasty retreat. They had been discomfited by a girl's device."

## GLEAMS OF NEWS.

**That Silver Lining** to the clouds which have hung like a pall over the pursuit of bee-keeping for the past few years, is thus commented upon in last week's *Prairie Farmer* by Mrs. L. Harrison:

Bee-stock has been below par for a couple of years, but, as every cloud has a silver lining, let all engaged in the fascinating pursuit, keep up their courage, hoping for a prosperous season in the near future. There is one happy coincidence, however, to console us over the flabby condition of our purses, that if we have no honey to sell to fill them up, bees generally winter well after a poor season. The queen has plenty of room to deposit eggs, and vigorous young bees to act as nurses, for they have no secreting of wax or building of comb to attend to. When there is an abundance of honey, all hands are pressed into service, and the queen is neglected, so that when the season closes the bees are mostly old, with little vitality to withstand the winter's cold; then we hear of diarrhea, spring-dwindling, and kindred ills; but now our colonies are strong, with queens doing their level best, and at the approach of cold weather will be full of vigorous workers, hardly as a nut.

Cross bees at this season! Yes, indeed; some of them are hot as a streak of lightning. The best way is to feed them a little for a few days, before disturbing them, especially if they have no unsealed honey. A well-fed colony is as good-natured as a fat alderman after dinner, but paupers are very different.

**Feeding Back.**—This is relied upon by the cranks, who persist in claiming that comb honey is adulterated, to prove their point. We have repeatedly asserted that such is not practiced to any extent—is not profitable—and therefore does not in the slightest degree uphold or sustain the assertion of Wiley, Evans & Co.—still they repeat the story over and over again. The last issue of the *Rural Canadian* contains this corroboration of our statement:

Mr. S. T. Pettit, for two years President of the Ontario Bee-Keepers' Association, says that a few years ago some one gave a plan of securing lots of comb honey by the use of the extractor; throwing out the nectar green, as fast as it came in, thus exciting the bees to gather all they possibly could, and then when the honey season was past, just feeding it back, thus securing big crops of comb honey. Well, the plan looked reasonable on paper, but in actual practice it looks very different to me. Of course, I waited until the gathering season was past, and then went enthusiastically to work giving unfinished sections, mostly, to work upon. Well, the amount they managed to cram away in the brood-chamber before starting at all in the sections, took a good deal of the enthusiasm out of me; but at length they went reluctantly, tardily, at work in the sections. But the sections were not as nice as those built by the same bees during the honey-flow.

Another set-back to the scheme was found in the great loss of weight during the feeding-back process. I did not keep an accurate account, but I believe it to be 40 to 50 per cent.

Another serious objection that presented itself consisted in the fact that all the bees used for feeding back died outright or

dwindled badly. Too much honey in the brood-chamber I think was the cause.

My opinion is, that it will not pay to feed back, even to complete sections that are nearly finished, much less for the building of whole sections.

**Extracting the Wax.**—This is very often a great nuisance in a house, and many family jars have resulted from the process of rendering beeswax. In the *Western Plowman*, Mr. C. H. Dibbern gives some of his experience in these words:

I have lately experimented a good deal in rendering the wax from old brood-combs. In my experiments I have used about all known methods. I have boiled it and strained it; I dipped it from the top; I have steamed it and melted it in the sun extractors, but all with about the same result, not nearly all the wax would be secured.

Lately I had a pile of refuse from which I extracted all the wax I could get, but upon examination with a microscope I became convinced that a good deal of wax still remained. I filled a wash boiler full of it and boiled it until all the lumps separated. I had rigged up a box with a false slatted bottom in it. I poured the contents of the boiler into a strong burlap sack, placed it in the box after tying securely, placed a piece of plank on the sack, and a square block on top of that. I took a long plank to use as a lever, placing one end under a cleat nailed to the building, and commenced pressing the contents of the sack, gradually adding more weight till the pressure was about as great as the sack would stand without bursting. Leaving the weight on for an hour or more, the last drop of wax seemed to have separated from the mass in the sack. The wax and dirty water will be caught in the bottom of the box where it will readily cool.

After cleaning up this run I found we had seven pounds of nice, bright yellow wax, worth at least \$1.40, and much more to make into foundation. This experiment has convinced me that many thousands of dollars are annually lost by the imperfect methods of securing beeswax. When the comb is new or from cappings, it is easy enough to get all the wax, but old, dirty pieces of drone comb, or odds and ends, mixed with propolis, and what not, it is quite another matter. I am now convinced that the only way to get nearly all the wax from such comb, is to submit it, as hot as possible, to a high pressure.

**Bee-Keeping** was one of the most rural occupations. At the time when man first commenced to stir the soil for his daily bread, bees were managed for domestic use, to furnish the only product then known and used exclusively as a sweet. The discovery of sugar-making supplied a cheaper staple, which placed honey among the luxuries. For hundreds of years such has been the state of the honey trade. Now we see advanced bee-keeping increasing the production to an extent which will place honey on regular bill of fare of the most unpretentious hotels. Indeed, we should see it there today.—*Exchange*.

**A Home Market** for honey can be made by judiciously distributing the pamphlets, "Honey as Food and Medicine." Such will create a demand in any locality at remunerative prices. See list on the second page of this paper.

**Figwort.**—On page 649, will be found an article on this honey-producing plant, by R. S. Russell, committee on Honey Plants at the Indiana State Bee-Keepers' Association, Zionsville, Ind. Mrs. L. Harrison makes the following additional remarks on the same plant in the *Prairie Farmer*:

The Simpson honey-plant was brought to notice by Mr. Simpson, of Warren county, Ills. It is often called rattle-weed, as the seeds will rattle in the pod, and Carpenter's square, as it has a square stalk. It belongs to the figwort family, the botanical name *Scrophularia nodosa*, from its being a supposed remedy for scrofula. It delights in damp, shady ground, and grows wild over a large extent of country along hedges, old rail fences, stumps, etc. Willows are all good honey-plants. One tree bears all pistillate flowers; another all staminate. The pistillate yield honey, and the staminate pollen, and the bees act as marriage priests carrying the fertilizing powder from one to another.

There has been more honey gathered in one day from basswood than from any other source. Many persons learning this, planted out orchards, but were sadly disappointed in the yield. Plants do not yield honey in the same amount in different localities. While basswood yields largely in Canada, Vermont, Michigan, etc., it is worth but little for that purpose in Illinois.

**The Season in Canada** is thus described in the last issue of the *Rural Canadian*: "The past season has been a very poor one for bee-keepers. Last summer (1887) the drouth prevented clover from seeding, and this prevented the usual flora of this nectar-secreting plant, one upon which the bee-keeper depends so much for his profits. Linden yielded but little, and our only hope was thistle and fall flowers. Heavy and frequent showers have given a yield sufficient for winter, and perhaps an average of 15 pounds to the colony surplus. Of course it will be necessary to distribute this evenly between those colonies which have gathered insufficient."

**Irresponsible.**—In *Gleanings* for Sept. 1, 1888, we find this brief "puff":

We have for some time past had complaint from different parties in regard to Mr. F. J. Crowley, dealer in apiarian supplies, Batavia, Genesee county, N. Y. We are now informed that he is in Batavia only a part of the time, and is no way responsible.

He has also been owing us for several years, but we can get nothing from him. There are many more very much like Crowley, whose transactions ought to be published for the benefit of honest men. We are considering the matter of publishing a black list, and we may have to do it yet.

**A Modern BEE-FARM**, and its Economic Management; showing how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man. By S. Simmins. For sale at this office. Price, \$1, postpaid.



**Look at Your Wrapper Label.**

—The date there indicates the end of the month and year to which your subscription is paid. If that date is past, we hope you will sit down at once and send us the necessary dollar to move the date a year ahead. The following incident, from the *Breeder's Journal*, illustrates the danger of procrastination in this matter of punctually paying subscription for your paper:

Not long since, says a writer, I dropped into a prominent newspaper office, and, while chatting with the editor, a well-to-do stock-raiser of that county dropped in and planked down the necessary amount for two years' subscription in advance for the paper, and at the same time remarked:

"I want the tag on my paper to be in such a shape that I need not be ashamed, when a friend calls at my house, to let him see it. You may believe me or not, but it is a fact all the same," he continued, "that a little matter like that has already saved me considerable money; and one particular instance I want to tell you about. I had some dealings with a certain man," said he, "and one day, while at his house for the purpose of selling him some sheep, I chanced to pick up his newspaper. I observed by the tag upon the margin that he was terribly in arrears for it. The fact that a man would allow his newspaper account to run on, year after year, to such an extent, set me to thinking, and I resolved that should he ask me for credit—he already owed me for fifty head of fine sheep—I would respectfully decline his request. As I had anticipated, he did ask for time, which I not only refused him, but demanded the amount already due me. He was unable to meet the obligation just then, he said, but would do so very soon. I sold my stock elsewhere, but I never got the money out of the man for the sheep I had previously sold him, nor do I expect to. Had I not seen that tell-tale newspaper tag he might have stuck me still further. Now, when I am in doubt as to a man's responsibility, all I want to enable me to accurately size him up is, to get my optics on his newspaper tag, and in nine cases out of ten I will never be mistaken in my estimate of him."

We commend this item to the careful perusal of all those who are in arrears for their reading matter. Good credit is better than a fortune—nay, it is a fortune itself.

### **Rustic Superstitions about the Bees.**—We clip the following from the *Scottish Farming World*:

Many curious and quaint traditions, dating from a remote past, still linger around the venerable straw hive, and upon which we may dwell more at length on some future occasion. Not a few cottage bee-keepers of the old school still devoutly believe in the efficacy of adhering to old customs to the very letter, absurd and amusing as they appear to outsiders. It is considered indispensable at the outset that the swarm be paid for in gold; silver coin is supposed to be "unlucky," and, accordingly, the lesser gold coin is tendered almost invariably in payment. It is just possible, however, that this tradition may have originated on the part of some shrewd bee-keeper anxious to keep up the price at a time when swarms were many and sales few. In some places it is the practice to put a little sugar at the hive-entrance on Christmas Eve, and at the stroke of midnight the bees are believed to come down and eat it. If a death occurs in a family, the hives must be draped with the insignia of mourning, and at night the bees are "woken up" by sharply rapping the hives with the knuckles, and each is then

informed of the event; the sound caused by the humming of the bees inside the hives, alarmed at being "woken up" in such a manner, is considered to be their response to the communication. A generation ago this belief was very general, and it has still many adherents.

Quite recently a couple of old bee-keepers, Sam Goodheave and Phil Hackles, characteristic representatives of the old school, discussed the topic, happily unconscious of a "chill" standing by "taking notes." We subjoin it verbatim:

"Our Joe tells me that poor old Tom Hedgestake's heeves be all dead arter all," said Sam, "and he fed 'um too, all the time he could still get about."

"What else could 'ees widder expect," replied Phil. "She ne'er woke 'em up when the old man died, and ne'er put one of 'em in mourning."

"Well, I told how't would be," Sam rejoined; "and now she sees plain enough how my words become true. But there be a many people that'll ne'er be told nothing, and so she must put up with consequences."

"Bees be curis things now," observes Sam musingly, after lighting a fresh pipe; "and I well mind how, when Uncle Jim died—that was in the 'ear '60—his heeves all perished the followin' winter, as there was not a scrap o' black put on any on 'em. Now when my feyther died, and that nigh on thirty 'ear ago, I took care to wake the bees up and put all the heeves in mournin'. I cut up his old black weskit on purpose, and not one on 'em perished; and they was the forriddest too swarm of anybody's round about that spring. What a whoppin' lot o' honey I had that 'ear surely! I sold £6 worth, 'sides what we ate inside, and brewed a big barrel o' mayde in t' bargain."

**CONVENTION DIRECTORY.**

1888	Time and Place of Meeting.
Oct. 3-5.	North American, at Columbus, O. W. Z. Hutchinson, Sec., Flint, Mich.
Oct. 4.	Ohio State, at Columbus, O. Frank A. Eaton, Sec., Bluffton, O.
Oct. 6.	Susquehanna County, at Montrose, Pa. H. M. Seeley, Sec., Harford, Pa.
Oct. 16, 17.	Union, at Clayton, Ills. S. N. Black, Pres., Clayton, Ills.
Nov. 21, 22.	Pan-Handle, at Wheeling, W. Va. W. L. Kinsey, Sec., Blaine, O.
Dec. —.	Michigan State, at Jackson, Mich. H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

## **SELECTIONS FROM OUR LETTER BOX**

**Results of the Season.**—J. E. Boyles, Nelsonville, O., on Sept. 17, 1888, writes:

I wintered 30 colonies, spring count, on the summer stands. I have always wintered my bees that way, and generally with success, but not always. They came through in nice condition, and all bred up early except one which was queenless. I gave them brood with adhering bees, and a queen-cell, and they soon became strong, but too late to store surplus. I have five new colonies by natural swarming. The last one on June 18 was a large one, and became very strong, but too late also for surplus. All of the 33 colonies stored more or less honey in the sections, amounting to about 1,000 pounds, although a portion of

the sections were unfinished. I sell in my home market, and mostly at the stores where I sell garden stuff, as I am in the garden business. I get 16 cents per pound for honey, in cash, or 20 cents in merchandise. I could always sell more if I had it. The present crop is about two-thirds gone, and I could have sold all of it by this time, had I not been crowded with my other work. Our honey harvest was ended by July 5. We never look for a fall crop here; yet the bees have had much better late forage than usual, as we have had plenty of rain.

**Decidedly the Best Season.**—N. C. Clayton, Central, S. C., on Sept. 19, 1888, says:

I have been a bee-keeper several years in a locality that, years ago, was exceedingly good for bees, but of late it has been the reverse, some years having no surplus at all. But since applying modern improvements I get some honey every year, and my report for this year is decidedly the best it ever has been. I began in the spring with 31 colonies, controlled swarming pretty well by extracting, and took about 75 gallons of honey. There is not much market for honey here.

**What a Woman Can Do.**—Mrs. Harriet A. Gale, Shelby, Lake Co., Ind., thus writes of her season's work and the cash results:

My bees have done well for the past season. I have 18 colonies now with honey-boxes on the hives. When those on are finished, my crop will amount to over a thousand pounds, which I have already sold for 18 cents per pound, and a part of it is already shipped.

**Determining the Sex of Bee Eggs.**—M. S. Morgan, South Elgin, Ills., on Sept. 27, 1888, writes:

I am obliged to dissent from the commonly received theory that the volition of the queen determines the sex of her eggs. In my opinion, after her fertilization any one of her eggs will produce a worker, a queen, or a drone, according to the purpose and manipulation of the workers. A proof that a worker-egg may be made to produce a drone, may be obtained in this way: Divide a colony, giving to the new hive, bees with sealed worker-brood only, together with a queen-cell. Be sure that there are no drones in the new hive. Now from a colony that have killed off their drones, select any one frame of entire worker brood having a few unhatched eggs; place this frame in the new hive; and I will guarantee that upon this frame will be found the elongated cells of drones, whilst in the colony from which it was taken, there will be workers only. The egg with the sperm attached produces a worker; the same egg with the sperm detached, produces a drone; the separation being made by the volition of the worker, and not by the volition of the queen.

**We will Present a Pocket Dictionary** for two subscribers with \$2.00. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

**Your Full Address**, plainly written, is very essential in order to avoid mistakes.

## QUERIES REPLIES.

### Handling Bees with Veil and Gloves.

Written for the American Bee Journal

**Query 580.**—Is it desirable to use a veil or gloves, when handling bees?—Kentucky.

Veil, yes; gloves, no.—G. M. DOOLITTLE.

A veil almost always, but gloves never.—JAMES HEDDON.

Yes, a veil, but no gloves.—J. P. H. BROWN.

A veil, but no gloves.—C. C. MILLER.

Yes, a veil, but not gloves.—R. L. TAYLOR.

I use a veil, but no gloves.—J. M. HAMBAUGH.

If the bees are disposed to sting, yes. If not, no.—M. MAHIN.

Yes, a veil, when necessary to prevent stings. Gloves never, say I.—A. J. COOK.

A veil, yes; but not gloves, unless you cut off the finger tips.—DADANT & SON.

A veil is very desirable at times. I never handle bees with gloves.—H. D. CUTTING.

I prefer to. You cannot always or sometimes tell how bees are going to act.—MRS. L. HARRISON.

Sometimes it is best to use both, and "Kentucky" is not much of a bee-keepers if he cannot tell when.—A. B. MASON.

Sometimes it is well to use a veil, but gloves of any kind are useless.—C. H. DIBBERN.

It will depend wholly upon the individual, and on the bees. There have been times with myself, where both were absolutely necessary.—J. E. POND.

It is desirable to have a veil ready for use, and to use it when you feel like it. Gloves are seldom needed. Bees usually strike "above the belt." Since the long hairs off the back of the hands, and do not jerk back if a bee darts at the hand. Keep your nerves steady and—hold your breath!—EUGENE SECOR

There are times that bees can be handled with impunity without a veil, but after one gets stung on the bridge of the nose, or other tender spots on the face, he will always think of having a veil when handling bees. Gloves are a nuisance, and not desirable.—P. L. VIALLO.

It is very desirable to me on some occasions. I do not often wear gloves, but I would use them oftener if I could get gloves that would not be in the way of nimble fingering. A bee-veil is among the essential devices in apiary work. I frequently hear people say that they have no use for a veil or gloves. It is evident that such people know but little about handling bees. When taking honey, tiering-up, etc., during the honey flow, I rarely ever use a veil; but I frequently go through hybrid colonies to remove queen-cells

and such-like operations, and I know that I have met with cases where an unprotected person would get a sting in every square inch of his hide.—G. W. DEMAREE.

I use a veil, but no gloves. I am not often stung, but the chance of a sting in the eye, or a bee in the ear, causes me to wear a veil.—J. M. SHUCK.

When honey is coming in, there is but little reason for wearing a veil, but a good smoker should always be at hand, for use in case of an emergency—an accident, for instance. Gloves are of use, to protect the hands, when the finger-tips are cut off, in times when the bees are cross, or there is a dearth of honey.—THE EDITOR.

### Bee-Sting Remedies.

Written for the American Bee Journal

**Query 581.**—Are the so-called bee-sting remedies of any value for curing bee-stings? Iowa.

I think not.—R. L. TAYLOR.

They are of very little value.—J. P. H. BROWN.

I think not.—J. M. HAMBAUGH.

None that I have used, and I have tried many.—JAMES HEDDON.

Yes, a little. I think that ammonia is the best.—A. J. COOK.

We tried them, and think nothing of any of them, except cold water.—DADANT & SON.

Some of them are. The oils of cinnamon and cloves have been of real value to us this season.—A. B. MASON.

Very little, if any. The best remedy I have found is saliva from my own mouth.—M. MAHIN.

I do not know from experience, but my faith in them is not very strong.—C. C. MILLER.

From experience and reading on the subject, I am of the opinion that no remedy of value has as yet been found.—J. E. POND.

Simple pure ammonia is the best of anything I have used, but of late years I have not used anything.—H. D. CUTTING.

Not any that I have ever tried. If a person belonging to my family were stung badly, I should put them in a wet sheet pack. If an animal, in like manner.—MRS. L. HARRISON.

I never use any. Years ago, when I first commenced, few suffered more from stings than I did. Now they affect me but little more than an insect bite.—G. M. DOOLITTLE.

They have proven worthless so far as I have experimented with them. It is proper to say, however, that a bee-sting amounts to very little with me, anyway.—G. W. DEMAREE.

They will alleviate the pain and lessen the swelling on persons not used to stings. The professional bee-keeper has little use for them.—C. H. DIBBERN.

I have not tried everything, but nothing that I ever did try did any good, so far as I could discover. Stings


do not swell on me any more. If I get stung on the end of the nose, my friends do not notice any difference.—EUGENE SECOR.


The absorption of the poison is immediate, and no local application is of any value. I would like to have Prof. Cook give us an article on the subject, and bring in the action of the hypodermic syringe to fully demonstrate this.—P. L. VIALLO.


I think not. A sting in the hand, where I always get it, if at all, can be instantly rubbed out on the clothing, and, many times, the poison will not reach the blood at all. The bee will often be crushed in this way before it has pushed its lance into the skin.—J. M. SHUCK.


Our British friends are very enthusiastic in their praise of the use of apifuge for the prevention of being stung by bees. When Mr. Cowan was here he spoke very highly of it—though some have condemned it, or stated that they did not think it of value as a preventive. When stung some use ammonia to advantage to allay the pain; others apply smoke for the same purpose. The poison acid may be neutralized by an alkali; saltpetre for instance. Ice-cold water, if applied at once, will drive the blood back, and quite often affords relief.—THE EDITOR

### Convention Notices.

 The Pan-Handle Bee-Keepers' Association will hold its next meeting in the K. of P. Hall on Main St., between 11th & 12th Streets, in Wheeling, W. Va., on Nov. 21 and 22, 1888. All bee-keepers are cordially invited. W. L. KINSEY, Sec.

 The next meeting of the Union Bee-Keepers' Association will be held at Clayton, Ill., on Tuesday and Wednesday, Oct. 16 and 17, 1888, in the Town Hall at 10:30 a.m. The Park Hotel will charge \$1.00 per day; the restaurants 25 cts. per meal. We expect Messrs. Dadant, Hambaugh, Camm and other prominent bee-keepers to be present. S. N. BLACK, Pres.

 The Ohio State Bee-Keepers' Association will hold its 8th annual meeting in joint convention with the North American Bee-Keepers' Society at Columbus, O., on Oct. 3, 4 and 5, 1888. A special business session of the Ohio State Bee-Keepers' Association will be held on Oct. 4, to elect officers for the coming year, and for the transaction of other business. This business meeting will not interfere with the regular programme of the National convention of the same day. FRANK A. KATON, Sec.

 The North American Bee-Keepers' Society will hold its annual meeting on Oct. 3, 4 and 5, 1888, in Representatives' Hall at the capitol in Columbus, Ohio. The Passenger Traffic Associations will grant reduced rates only when 100 persons are present, holding railroad certificates. Owing to the short honey crop it is feared that a sufficient number of persons will not be present holding certificates, and that an attempt on the part of the Society to avail itself of the reduced rates offered by the Passenger Traffic Associations will only result in disappointment; hence it has been decided that the only course open will be to allow each member to shift for himself, or herself, to either take advantage of such excursion rates as may be available in his or her vicinity, buy round-trip tickets, or do something of the sort. W. Z. HUTCHINSON, Secretary.

**Always Mention** your Post-Office, County and State when writing to this office. No matter where you may happen to be for the hour when actually writing—never mention anything but your permanent address. To do otherwise leads to confusion, unless you desire your address changed. In that case state the old as well as the new address.

**Scatter the Leaflets.**—Look at the list (with prices) on the second page.



## CORRESPONDENCE.

### The Battle-Bees.

Were you there when the columns swirled about,  
Did you hear the cannons' rattle?  
Did you hear the regiments' lusty shout,  
And the hum of the Bees of Battle?

The bees that hummed in the air were of lead;  
How they sang through the leafy bowers!  
And the juice of the flowers which they drank was red—  
How the Battle-Bees fed on flowers!

Were you there when the bees came humming through,  
Were you there when they so beset us,  
When the honey they made with so much ado  
Was sweeter than that of Hymettus?

Was it sweet? Ah, it was! So I say again:  
Its sweetness is told in story—  
It was deadly sweet to the armies twain—  
But the honey was only glory.

—Selected.

## BEE-DIARRHEA.

### The Result of Experiments Made to Discover the Cause of It.

Written for the American Bee Journal

BY G. R. PIERCE.

Query 564 reads thus: "During December, January and February of the winter of 1884-85 I lost 700 full colonies out of 900 located in five apiaries.... The frames and combs were badly smeared with excreta where there were a few bees and queen left.... The winter of 1885-86 was the same with 600 colonies. The winter of 1886-87 all of 400 colonies came through to February. They commenced dwindling then, and went down one-third.... The past winter has been the same. I have some 15 or 20 colonies that have withstood all these winters, and have come out good every time under the same conditions. 1. Have you had this experience? 2. What is it? 3. How can I stop it?—Illinois."

The above is the substance of Query 564, on page 502. It was accompanied by the opinions of some twelve experienced apiarists as to the cause of the disease in question, and how to prevent it—a few to whom the query had evidently been submitted, not expressing any decided view on the subject. All who expressed any opinion were united in referring the trouble to bee-diarrhea, and the cause to improper food, but disagreed as to the manner of prevention. Some advise "Illinois" to feed pure cane-sugar; some to keep the bees in a warm cellar; to deprive them of pollen, etc.

#### Doubtful Cause of Bee-Diarrhea.

I believe but very few persons who have kept bees in the Northern States will hesitate in naming the disease referred to in the Query as bee-diarrhea; but as to the cause—that is the rub! That is the winter problem which has been discussed upon in all the bee-periodicals of the land during the past twenty years, and if there has ever been a clear, rational explanation given of the cause of this disease—the dread of the Northern bee-keeper—it is not

yet manifest to the mental vision of the fraternity. The hypothesis of to-day does not become a theory to-morrow, but is kicked out to give place to the next plausible explanation that may be offered; in the meantime, the disease "gets there just the same," as sure as the winters come on—at least it does with the majority of bee-keepers.

#### Facts Discovered in Experimenting.

I do not propose, in this article, to advance any explanation as to the cause of the trouble under consideration—this would require more time than I have at present at my command—but rather to bring forward some facts which I think have escaped the attention of some of the prominent writers on this question. I have indeed an hypothesis—as every bee-keeper must have—to explain the cause of winter losses in the apiary, but for the present I must try to confine my remarks to certain facts which I have noticed while conducting a series of experiments undertaken with a view to discover some practical method by which bees could be carried through the winter with as little risk as is incurred by the stockman in wintering his horses, cattle, sheep or hogs.

We may boast to our heart's content of the great advance made in bee-keeping; of our extractors, comb foundation machines, and the superiority of the improved hives now in use, over the bee-gums of our daddies, but after all the fact remains that the average winter mortality among bees is quite as high now as it was 25 years ago.

The winter of 1879-80 was very cold, all through the northwest, and the losses among bee-keepers were very extensive, especially among those who practiced out-door wintering. My own losses were so severe that I resolved to conduct a series of experiments with a view to arrive at some definite idea as to what was the cause of winter mortality among bees. I had for years taken much interest in this question; had read everything available on the subject; had tried nearly all methods and devices recommended in the bee-papers and books devoted to the industry; and had seen more or less of my bees die every winter and spring without being able to afford them any relief. I do not mean by saying this, that my losses were more than that of the average of bee-keepers in the North—I do not think they were as high as the average; but I was losing more bees than I thought necessary to lose if the proper conditions of wintering were understood.

#### Different Phases of Bee-Diarrhea.

The solution of the subject under consideration naturally leads along three lines of thought, viz.:

1. What is it?
2. What causes it?
3. What will prevent it?

It might be supposed that the first question was known from the start, but this idea is an error, arising from the notion that diarrhea is a specific disease, whereas it may be simply a corroborative symptom of some organic or constitutional derangement. Simple

diarrhea is generally caused by a sudden change in food or drink, or by the introduction of improper or vitiated alimentary substances; but it often occurs when the cause has not the remotest relation to food or drink. Medical writers recognize this distinction by treating of the subject under different heads—usually three—but as my education has been confined mainly to chemistry and *Materia Medica*, I shall not attempt to explain all the different phases of the disease.

#### The Quality of Winter Bee-Food.

Now to return to the Query, the question arises, did those bees have the diarrhea in its simplest form, or was it exhibited in connection with some derangement of the bee-system? If the former supposition is correct, then we may properly look to the food for the cause. If the latter, then the cause must be sought elsewhere. My opinion is that the disease, which is usually termed bee-diarrhea, is the out-growth of another disorder, and the cause of this is seldom, if ever, to be referred to the quality of the food. I do not wish to be understood as saying, that if bees were fed impure food they would not have the diarrhea, for they probably would. What I mean to assert is, that the quality of honey has nothing to do, in ninety-nine cases out of a hundred, with the bringing about of the disease in question. I am forced to this conclusion not only from experimental experience—which I have not time to set forth—but also from the following reasons:

First, when animals are afflicted with simple diarrhea, the organs of the system are in a relaxed condition; there is no distention or inflammation. In bee-diarrhea—so-called—there is unmistakable evidence of congestion and inflammation. The bloated appearance evidently does not result from the accumulation of fecal matter, for it does not disappear after evacuation. It might be urged that the retention of the feces in the intestines for an unusual time would cause irritation which would evidently produce inflammation in the surrounding membranes. This argument seems very reasonable, but I am disposed to believe that it is not applicable to this case for the following reasons:

1. It has been proven repeatedly by direct experiment, that bees can be kept housed for six months or more, on stores of honey and pollen, without any injurious effect. 2. Bees often become diseased within two or three days after having had a cleansing flight. 3. The disease usually makes itself manifest within a short period of time. I have repeatedly seen colonies become badly sickened within 10 or 12 hours after a previous examination, when, to all outward appearance, they were in perfect health. The second and third reasons, by themselves, prove nothing, but when taken together, tend to disprove the hypothesis that the disease is caused by fecal accumulation.

#### The Impure-Food Theory.

Second, I disbelieve in the "impure food" theory because, when improper substances are taken into the animal

system, nature acts *ab initio*—from the beginning. When a young man commences to use tobacco, he does not smoke a box of cigars before feeling the unpleasant effects of the weed; the first cigar or pipe generally "lays him out" limp and pale, with his whole internal apparatus in open rebellion and spasmodic eruption. The farmer understands that, if he feeds green food exclusively to animals, that have been fed upon hay, they will, for a time, "have the scours." These are only a few of the many examples that might be cited to illustrate that wise provision of the Creative Power, by which all animals are warned against partaking of substances which would cause the system to become deranged, even if the derangement is only temporary, as in the case of a sudden change of feed.

Third. There is still another objection to the "impure food" argument. Even when the adult members of a species of animals are enabled, by virtue of their superior physical power, to eat food which may not be best for them, if the same food be consumed by the same species of immature growth, the evil effects will very soon become apparent.

Now in the case of bee-diarrhea, neither the young bee, just emerging from its cell, nor the one that has nearly completed its course of life, exhibit any indications of disease until nearly the middle of the winter, and very often not until the month of March.

To still further show the fallacy of the prevalent idea that winter mortality of bees is caused by improper food, let me illustrate by the following facts that have come under my notice while studying this question:

#### Experiments in Wintering Bees.

Suppose we take ten hives containing colonies of normal strength, both as to bees and honey. Let these colonies be left on the summer stands and protected from the weather in any manner that the experimenter may see fit, provided it is so arranged that the clustered bees may be examined from the top, with as little disturbance as possible.

Now if we examine these colonies, say on Dec. 1, we shall find—if the weather is cold—the bees closely clustered in the front-center of the hive, with the top part of the living sphere from 3 to 5 inches below the top-bars of the brood-frames—the distance below will vary according to the disposition of the honey stores and the depth of the frame. If the weather continues cold, the motion of the cluster will be upward, and in time the bees at the top will be in close proximity to the honey-board or quilt, whichever may be used to cover the hive.

Suppose these 10 colonies are closely watched, and it is found that on Jan. 1, 4 colonies are so clustered as to reach over the frame tops; this interval of time—December to January—we will designate *a*. On Feb. 1, two more are in the same position, interval of time called *b*; still two more reach this position on Feb. 15, interval of time *c*, and

the last two on March 1, interval of time *d*.

Now what I wish to bring to the notice of the reader is, that during the interval of time *a*, there will be no danger of any of these 10 colonies becoming diseased. During the interval *b*, if there is disease it will be among the first 4 colonies named; during interval *c* only among six; during interval *d*, only among eight. After March 1, if very cold weather is experienced, or if the hives are not properly protected, all of the 10 colonies are liable to become diseased; but the chances of escape are in favor of those which were last to reach the top-bars, and against the first.

The question arises, what has the position of the clustered bees to do with the bringing on of the disease, if the cause is to be referred to improper food? If the honey in the upper region of the hive is unfit for bee-food, why is not that below?

But let us try another experiment. Take a good, strong colony—it is no matter about the quantity of stores—and in place of the honey-board place over it an empty hive, or a box, without top or bottom, of the same dimensions as the hive. To prevent its being moved, light cleats should be nailed on the lower edge, or straw may be piled around on all sides except the entrance. Now lay a piece of oil-cloth on the frames, and over this tuck snugly a piece of heavy blanket or quilt. Cover with a heavy board to keep out rain or snow. As soon as the clustered bees reach the top-bars, take six one-pound sections of sealed honey, cut out entrance-ways in the sides, and lay them close together, side downward, in such a manner that the center of the clustered bees will be directly under the general center of the sections. Replace the coverings, and do not disturb them until about the time they will have consumed most of the honey in the sections, when another course must be laid on, and so continue as long as the bees approach the coverings.

The result of this experiment will be, that the colony operated upon will be alive and in good health on the first day of April, or thereabouts, no matter whether there is pollen in the honey or not; no matter what kind of honey is used—only that it must be sealed—whether from white clover or buckwheat; gathered in the spring or fall, it makes no difference in the result. If any one doubts this, it may be verified or disproved during the coming winter.

#### What the Experiments Prove.

These experiments, together with others not mentioned, prove conclusively to me that *quality* of food has seldom, if ever, any part in producing diarrhea—so-called; and acting upon this theory, I have been enabled to so prepare my bees that I have had no losses from this cause during the past five winters, and shall prepare my colonies for the coming winter with perfect confidence that they will pass that heretofore critical period in vigorous health.

If the reader of this article desires to know what name I would give the disease, I would say that I am not an ex-

pert at clinical diagnosis, therefore I have not unlimited confidence in my conclusions; but if he will, for the time being, throw aside all preconceived notions about ventilation, absorption, hibernation, pollen consumption, etc., watch his bees and read some standard work on catarrh, he may, or may not, come to the conclusion to name it *intestinal catarrh*.

#### How to Prevent Winter Losses.

The main point, however, is to know how to prevent this trouble, and this can be done by the following:

1. Never stinting the bees in their supply of honey.

2. Keeping the hives so protected that the heat generated by the bees will be retained as long as possible within the hive.

I have no confidence in any system of wintering bees which does away with *hive protection*, not even when wintered in a cellar. The first cost is an item, but it pays well in the end.

Blairtown, Iowa.

## AUTUMN.

### Suggestions about the Necessary Fall Work.

Written for the Farmers' Advocate

BY R. F. HOLTERMANN.

As the honey-flow has been so very short this season, bee-keepers will be inclined to take away more honey from their bees than good judgment should allow, and as a natural result the bees will starve before spring. If an upper story is put upon a hive, and this is called the surplus arrangement, it does not mean that the bees can spare all they put in a jar from it; of extracted honey, especially, the bees rarely have enough in the lower combs for winter. So many bees are lost by starvation, and so much has been said upon this subject that it would seem almost as if there was no use in writing upon this subject.

Get your bees ready for winter early—in fact, in summer it should commence, and as the brood will often not permit the storing of sufficient honey below, reserve two or three combs of good honey well capped, and have these to fall back on in every hive, if they do not have the requisite quantity of honey on Oct. 1. Take out combs free from brood and with the least honey, and put in the combs of sealed honey.

It is a very bad plan to feed—time is taken up. The bees rob if they get the least chance; it wears the bees of the hive out as a honey-flow does, and leaves them aged for winter; and there is a great, actual waste by the bees in placing their stores in the hive, to say nothing of the bad impression that your neighbors get to see you haul home sugar and feed it to the bees; they of course at once say you are "making honey." See, then, that your bees have 30 pounds of feed, an average hive with combs and bees weighing 20 pounds. Have this feeding done before Oct. 1.



**Winter-Passages in Brood-Combs.**

These enable the bees to pass from comb to comb without having to pass under them or around the sides, and the desirability of such passages will be better understood when it is remembered that the lower part of the hive is colder than the upper. The bees cluster on the combs in a ball-shape, for instance, the center combs have the largest number of bees, and the outside combs the least of any. The size of this cluster depends upon the temperature of the hive, and the higher the temperature the more the bees spread over the frames; the colder, the more compactly they cluster. Then as they cluster in a ball shape, when the cluster contracts they can contract on each comb, but not towards the center of the cluster unless they go down or outside and pass around the comb, which is a movement just opposite to the natural, and those on the outside combs become isolated and perish. If there was a passage through each comb, where the center of the cluster on the comb would be, the bees could pass through and join the cluster on the other side. The best position for the passage would be in the center of the upper two-thirds of the comb, above rather than below.

There are many contrivances for cutting or punching these holes. Perhaps the best is a cone-shaped piece of tin, growing in diameter, as it recedes from the cutting end. This can cut a round hole through the comb, allowing the piece of comb removed to slide out on the wide end of the cone. Another plan resorted to is, to lay a bridge over the top boxes. This bridge is constructed simply of sticks, so made as to allow the bees to pass from comb to over the top boxes. If you winter your bees outside, it is particularly desirable to make these passages for the bees. In a warm cellar it is less necessary.

**Old and Worn-Out Queens.**

Many colonies perish in winter or early spring because their queens are old and worn-out, and perish at this season of the year. A queen will sometimes be vigorous and prolific when five years old, but much oftener a queen will be in that condition in which she should be replaced by a young and vigorous queen, at three years of age.

The question naturally follows, how shall we know the age of a queen? This is a somewhat difficult matter, and a careful record of each hive, which should be numbered, is a good way. Bear in mind that the old queen issues with the swarm, and you must transfer the record with the swarm. If queens' wings are clipped, the front right wing may be clipped the first year, the rear right the second year, and the left, next in order. If you have only a few colonies you should have no trouble to tell the age, and should know all your queens by sight.

If you have old queens replace them before fall; this may be done by taking out the queen and placing a queen-cell in the hive which you know is about ready to hatch. Use good stock, and now and then purchase a "dollar

queen" from some one whose bees you know have blood different from your own bees. In bees, as in other stock, new blood of the right kind gives vigor and energy—very desirable qualities in bees.

Brantford, Ont.

**BEE-PASTURAGE.****Figwort, or Simpson Honey-Plant, for Honey.**

Read at the Indiana State Convention  
BY R. S. RUSSELL.

Where is there one who has handled bees and made them his associates, who doubts for a moment that these industrious little misers will appreciate any improvement in their homes and plantation, and doubly repay any judicious outlay toward supplying them suitable plants from which to extract the honey?

We believe that a bee is not happy except when employed gathering the sweets which Nature stores in certain plants. Now is the time to lay the foundation for an abundant honey harvest.

If you have no bee-willow near your apiary, procure a few roots or cuttings, and plant in low land near the apiary.



*Simpson Honey-Plant—Figwort.*

This will bring the earliest pollen, which is the most useful. The bark will crack late in the fall and furnish a harvest of honey after frost has killed all flowers. Also set out a few soft and hard maples, and tap lightly in two or three places early in the spring. Set these trees near the beehouse, as many bees are chilled and lost in rambling for the early sweets.

Be sure and save all the basswood on your farm, and plant a few more in old pastures for shade. Plant catnip, the more the better, near the apiary; it is fine for the young bees. Spare all the golden-rod when mowing the fence-corners, also all asters. The bees will tell you what they are when in bloom, if you do not recognize your friends.

Sow a patch of buckwheat on July 1 and 20; and also on Aug. 10 and Sept. 1. Last but not least, procure a supply of Simpson's honey-plant seed from some reliable apiarist or seedsman. It can be sown in hot-beds, and trans-

planted the same as cabbage, or sown in open ground. It will grow anywhere, in fence-corners or waste ground, in shade or cultivated fields, planted 2½ feet apart. It is a certain grower, and will "get there" whether cultivated or not.

This is, beyond doubt, by far the best honey-plant of all, giving a steady flow of good honey from the middle of July until killed by frost. The honey accumulates in the cup-shaped flowers, and if all removed will almost immediately fill up again, thus affording an inexhaustible supply faster than the busy workers can remove and store it.

I have noticed no disease in my apiary since I have raised this honey-plant. I think that the secret is, it keeps the bees employed gathering good, healthy honey, instead of trying to extract it from decaying fruits and vegetables in the fall months, which they are sure to do unless they can work on something better.

It is a medicinal plant, but is not eaten or disturbed by stock of any kind, and will take care of itself after the first year. It is not a noxious weed which will take possession of your farm, but is easily exterminated.

Brother apiarists, I can imagine no lovelier stroll than through my woods in August and September. This honey-plant is in full bloom, and the beautiful Italian bees make the woods musical from daylight until dark. I will not speak of the merits of the different varieties of clover, as of necessity they will be sown, and help to round out a season for the most industrious creature of God's creation.

**GRAPE BLOOM.****Bees Gathering Honey from Grape-Blossoms.**

Written for the American Bee Journal  
BY PROF. A. J. COOK.

"Do men gather grapes from thistles?" No, but bees gather honey or nectar from grapes.

A few days since a gentleman from Texas sent me what he thought was a kind of sarsaparilla, with the statement that bees were collecting much honey from it. He was a subscriber to *Gleanings*, and at his request I named the plant for that paper.

Now our friend C. F. Muth, sends me the same plant with the following: "Our friend J. W. Park sends the enclosed plant and blossom from Columbia, Texas. He calls it 'cow-itch,' and says that it grows profusely in his neighborhood, and yields very abundantly of a superior quality of honey."

Right here we see the mischief of common names, and the necessity of scientific ones. One calls this "sarsaparilla," and one "cow-itch," and it is really one of the very reputable grape family. It is *Vitis bipinnata*. It is a bushy, low, climbing vine, with fruit about the size of a pea, but not eatable.

As will be seen, it belongs to the same genus—*Vitis*—that includes all our grapes. *Vitis vinifera* is the Euro-

pean grape; *Vitis lobrusca* is the northern fox grape; *Vitis aestivalis*, the summer grape; *Vitis cordifolia*, winter or frost grape; and *Vitis vulpina*, the southern fox grape. *V. indivisa* is more closely related to the one in question, as its berries are not edible.

Agricultural College, Mich.

## BABY BEES.

### A Few Thoughts for Children About Young Bees.

Written for the Prairie Farmer  
BY MRS. L. HARRISON.

There is a good deal more in a colony of bees than the honey and wax they produce. They are models of industry, neatness and order. About the first lines engraved on the plastic clay of my memory, are these of Watts:

How doth the little busy bee  
Improve each shining hour,  
And gather honey all the day,  
From every opening flower.

How skillfully she builds her cell,  
How neat she spreads the wax,  
And labors hard to store it well  
With the sweet food she makes.

Children should be taught to watch the bees as they go in and out of their hives, and, particularly, notice that each individual bee has a duty to perform for which it is accountable. The guards protect the entrance against all intruders, and no enemy is allowed to pass without resistance. It is amusing to watch a bumble-bee as it tries to evade the guards and gain access to the rich stores within. How soon his back is mounted, and "policemen" at his side bring him forth, as he loudly buzzes and struggles for freedom. Bees from neighboring hives are not allowed to enter without showing their passport, which is a well-filled sac of nectar, while all paupers are denied entrance. Woe betide the moth that has the presumption to knock at the door of a strong colony of Italians, for it will never try that game again.

When the young drone bee emerges from the cell, he looks around for something good to eat. If he is not fed by the field workers, he goes to a cell and helps himself. This he is allowed to do *ad libitum*, until his duties commence, which, in his case, is to fertilize a queen. He daily sallies forth in quest of her, to perform the task for which was the purpose of his creation, and in the performance yields up his life. If he is not needed for this duty, he must "walk the plank," for no needless members are allowed, but all must succumb to the good of the commonwealth.

The young worker is allowed a few days to eat and digest food, when her duties as nurse to the larvæ and queen commence.

The duties of the queen are so onerous, in the production of so many eggs, that her system is not capable of sustaining the draught, unless her food is given her in a half-digested state, so that it readily assimilates. The queen, even, is not allowed in the hive, if she does not perform her duties properly.

She must not "skip any stitches," but go round and round in a circle, using every cell; and her progeny must be able to perform their duties, or she is ejected. Woe betide her, if she rears all "boys" and no "girls," and her owner finds it out.

When the worker's duties of a nurse are completed, she takes a rest in secreting wax and building comb, and is allowed a play spell after dinner, that she may learn the location of her hive. Perhaps she is given a lesson now and then in stinging, as she is always an adept at it, and ready, on the least provocation, to "curl her tail." We see more of her in her capacity as guard and field-worker than in any other.

She attends strictly to business, and, when gathering clover honey, does not stop to smell the fragrance of roses, pinks and posies, but goes quickly from one clover blossom to another. There is harmony in Nature, and she must carry the fertilizing powder from flower to flower, so that the seed will germinate, and the plant be perpetuated.

Peoria, Ills.

## IOWA.

### Report of the Iowa State Bee-Keepers' Convention.

Written for the American Bee Journal  
BY JOS. NYSEWANDER.

The Iowa State Bee-Keepers' Association met in their commodious tent on the Fair Grounds during the State Fair, on Sept. 4 and 5, 1888. In the absence of President Spaulding, Joseph Nysewander acted as temporary chairman at the opening of the meeting. In the election of officers the following were chosen for the ensuing year:

President, Mrs. O. F. Jackson, of Sigourney, Iowa; Vice-President, Eugene Secor, of Forest City; Secretary, J. W. Moore, of Des Moines; and Treasurer, Jos. Nysewander, of Des Moines.

The subjects discussed were appropriate to the season, which, being a peculiar one, brought new experiences to many. Much swarming and little surplus honey is the exception to the rule in Iowa. There seemed to be just enough honey gathered to engender much swarming, while with fewer swarms fair returns could have been secured in the way of surplus honey.

#### How to Control Swarming.

Several plans were presented that had been successfully employed by different members present. It was conceded that a single swarm from one colony was rather an advantage than a disadvantage, as it was possible to have the benefit of 2 colonies instead of one when the real harvest came. Upon this theory Mr. Chantry suggested that it was his method to work for increase until July, and then have the several colonies, instead of one, ready for the fall flowers; it being understood, however, that he is entirely dependent upon the fall bloom for his

honey crop. Ordinarily, or in most locations, this method was deemed impracticable.

Mr. Kimble said he thought that he could secure the best results by having about one-third increase; and in response to a number asking the question as to whether it was possible to confine his colonies to a certain number, he thought that he would have to depend on at least that much increase.

Mr. Secor stated that he practiced hiving the first swarms on the old stand, and removing the parent colony to a new location. He found that this in most cases brought about the desired result. Others suggested cutting out queen-cells, etc., which they found quite satisfactory, although it required more labor.

It was found that even this season, that those who were able to control swarming, had a fair yield of honey to report. Mr. Secor stated that up to that date, which did not include the fall honey, or at least very little of it, that his colonies averaged about 40 pounds each, of comb honey. He believed that bees should be made to pay their way in any season.

#### Honey from Different Flowers.

In discussing this subject, Mr. Bittenbender stated that it was his observation that bees never gathered nectar from different kinds of flowers in a single trip.

Mr. Secor said that he noticed at different times that some of his colonies would be storing one kind of honey, while others in the same apiary would be storing another kind.

The question arising that different kinds of honey were noticeable in the same comb, was explained by the fact that different flowers would secrete nectar at different times in the same day, and in such cases bees, unlike some human beings, would not lie idle for a favorite job; or, in other words, would not wait for a favorite flower to secrete honey.

#### The Use of Honey-Boards.

All that were present favored the use of honey-boards, whether working for comb or extracted honey. While poor queens will sometimes lay in the sections, and very little in the brood-chamber, such cases were more frequently the result of not using the honey-board. One of some description was highly indorsed, whether it was queen-excluding or not. Even if not queen-excluding, it would largely prevent this difficulty when working for comb honey. Queen-excluding boards were recommended where extracting was done, and many favored them in any case.

#### Danger to Bees in Extracting Late.

In reference to this subject, it was seen by a number of reports to have been the cause of heavy winter losses. It was conceded that a reserved store of honey should be preserved where close extracting was practiced. A sufficient number of sealed combs of honey, and of a good quality too, should be put away for this purpose; and after the honey season was over, it



should be placed in the center of the brood-chamber for the winter supply of food for the colony.

A committee was selected for arranging a programme for the next meeting. It is proposed to make that meeting one of the grandest in the history of the Association, and it cannot fail in its aims, having as co-operative workers the most enthusiastic, practical and able apiarists in the country. An announcement of the programme and time of meeting will be made in due time, in the different bee-papers.

Des Moines, Iowa.

## FUMIGATION

### With Sulphur—Sting-Trowel Theory.

Written for the American Bee Journal  
BY DR. C. C. MILLER.

I was a little surprised, on reading page 603, to find that one who appears to be so close an observer as Mr. Pierce, should hold views concerning sulphur, that, according to my experience, are erroneous. He is entirely right in saying what is not generally said (and perhaps it is not generally known), that after worms have obtained a good foothold, it is very difficult to kill them with sulphur.

I have had combs in which the worms have abounded, from those of small size to those of full grown, and after subjecting them to a very dense smoke of sulphur for a long time, the "fat old chaps" seemed to be none the worse for their smoking. Such combs, I think, I would not try to cure with sulphur. The cheapest and easiest way, probably, to dispose of them is to give them to the bees to clean out.

If it is not at a time when it is warm enough for bees to fly, the worms will not make much headway, and as soon as the worms are frozen, that is the last of them. If only a few worms are in a comb, and they are half-grown or larger, it is no very difficult matter to pick them out with a wire nail. But for the worms that are very small—and we never need wait for them to get large—the fumes of burning sulphur are very effective.

My experience has been almost entirely in fumigating comb honey in sections, and for that purpose sulphur may almost be said to be preventive, rather than curative, for the worms should be killed when they are hardly large enough to be seen by the naked eye. If a section be fumigated within two weeks after its removal from the bees, and then two weeks later, I think there need be little anxiety about the worms.

Having used a good many pounds of sulphur during a number of years, I think I may speak with some authority upon the subject, and I trust that Mr. Pierce will take it kindly when I say that I think he is mistaken on two points: first, as to the difficulty of regulating the combustion of sulphur, and second, as to the necessity for burning sulphur in connection with some car-

bonaceous substance. With regard to the latter, I may say that I never burn anything in connection with sulphur, simply lay a lighted match upon the sulphur, and there is no difficulty about the dim, blue blaze continuing as long as a grain of sulphur remains.

As to the difficulty of regulating, especially when a large amount is used; let me give a bit of my experience in a previous year:

I had a lot of sections piled in a room about 15 feet square, and concluded to smoke the whole room. So I lighted 5 pounds of sulphur early enough in the day so that I thought it would all burn before night, and kept occasional watch of it through a window. At dark it was burning apparently the same as when first lighted, and at bedtime the same. Although I thought it entirely safe, I never feel that I can be too careful about fire, so I concluded to sit up with it until it expired. I did not get to bed until after 1 o'clock.

My method of using was this: The sulphur was put in an iron kettle holding about a gallon. A common kettle holding 3 or 4 gallons was partly filled with ashes, and in this the smaller kettle containing the sulphur was placed, and over all a tin cover that did not fit closely. I suppose this cover allowed plenty of air to enter to keep up combustion, but made it burn slower than if entirely uncovered. Previous to covering, a lighted match was laid on the sulphur, and that was all the attention it received except the watching, and no doubt it would have burned just the same if I had been a mile away.

I do not think that roll brimstone would act just the same, but I suspect a part of it mixed with the powdered sulphur might answer. The cost is so little that I have always used it in the powdered form.

### Bees Stinging the Capping of Cells.

Referring to "replies" on page 598, allow me to correct Dr. Mason and the Editor. Dr. Mason thinks that the man who believed that the bees did the capping with their stingers, never subscribed for a bee-periodical. Now Doctor, that idea originated with the Rev. W. F. Clarke, and was first promulgated in the bee-papers and his book, unless I am very much mistaken, and your man's believing it, was just so much proof that he had been reading the bee papers. The Doctor may be surprised at the man's belief, but a little thought will convince him that there is nothing surprising in it.

The statement was given in all soberness in the columns of our bee-papers, and coming from a respectable source, why should it not be believed? If I remember rightly, it passed entirely unchallenged for a considerable length of time, and to this day I think not more than three individuals ever denied its truth, and not a single one of our editors ever said he thought it was not true. Why shouldn't the man believe it?

If the Doctor refers, not to the sting-trowel, but to the injection of formic acid after the cell was filled with honey, the case is not different, but still stronger, for I do not remember to

have seen that stated elsewhere than in the bee papers. The last place I remember seeing anything of the kind was in the *British Bee Journal* for Aug. 23, where, on page 409, Dr. A. von Planta quotes approvingly Dr. Muelenhoff in No. 6 of the *Eichstaedt Bienenzeitung*, where he says, on page 61, "When the cell is nearly filled, and the honey is not intended for immediate consumption, the bees add a drop of the secretion of their poison gland." Now we ought to know positively whether this is true or false. Somewhere, lately, Prof. Cook has called it in question—I mean aside from his answer in the present case—but I do not remember whether he says positively it is false, or simply that he does not believe it.

The Editor is in error, I think, in attributing the sting-acid theory to Rev. W. F. Clarke. I think it came from a number of sources, and it might be difficult now to determine who first started it. Mr. Clarke is "sponsor" for the "sting-trowel" theory—at least I do not know that any one else in this country has said he knew it was true, unless it be Dr. Mason's friend, although I have been told that the idea first had birth in France. Mr. Clarke, however, says he became satisfied of its truth as the result of observations. I seriously question whether Mr. Clarke ever made any observations that warranted him in giving utterance to the sting-trowel theory as a positively ascertained fact.

Marengo, Ills.

[If the editor was in error in the statement made on page 598 in answer to Query 575, our friend, the Rev. W. F. Clarke, will be very ready to show it. Editors are not always right, especially when they try to find "fathers" for waifs, or the offspring of fertile brains.—Ed.]

## CALIFORNIA.

### Honey Production on the Pacific Coast.

Written for the Riverside Press  
BY FRED. L. ALLES.

Throughout Southern California, for a distance of 300 miles, the Coast Range of Mountains is spotted with little canyons upon whose sides may be found a hundred varieties of wild flowers. Here and there rises an occasional live-oak or a clump of low growing pines. The body of this living carpet, covering the acclivity of the Temescal range, the San Jacinto mountains and the lower edges of the Sierra Madres, is composed of all the colors of the rainbow, and varies with the months and seasons, while heaps of gray old boulders, jutting clumps of sandstone and granite, and masses of chaparral, grease-wood and mesquite, with their neutral tints, give the eye relief from the too brilliant color surrounding them.

These canyons are the sources of the water supply for the valley vineyards

and orchards, and are the homes of the bee-masters of a land literally "flowing with honey."

Bee-farming in California bears little resemblance to the same industry elsewhere, on account of the novel difference in the seasons. Instead of making provision for long and cold winters, the bees are able here to gather nectar from New Year's Day to Christmas, and the bee-master takes out honey during eight months of the year. During January, February and March the orange and lemon trees of the valley orchards, and the wild acacia and eucalyptus (Australian blue-gum) are all in bloom, and furnish a fair quantity of nectar, but the larger part of this is consumed by the bees, and it is not the custom to take this from the hives. The so-called "orange-blossom honey" sometimes seen on the market, is not made from orange-blossom nectar at all, and is so labeled with intent to deceive.

Early in February the native sheep-grass, alfilerilla, furnishes an abundance of bloom, which makes a good honey of amber color, but not so good as that made from black sage, which blossoms later in the same month. This sage grows in the lowest valleys, and on the side of the mountain ranges in all parts of California, and is the best plant for bees, because its nectar gives them heart and vitality at a season when they most need it. The honey from it is of a fine color and strong body.

Early in June appears the best of all honey-producing plants—the white and silver sages. No flower in the world produces a clearer white, pure nectar than California silver sage. Eastern white clover and basswood (American linden) are splendid honey-producers, but both are inferior to the silver sage in making an article of delicious flavor, good body, and clear as pure water. These sages bloom usually during the entire month of June, and then comes the wild buckwheat, which has a blossom resembling the cultivated plant, and furnishes a honey of good quality and rich, amber color.

Early in July the wild alfalfa appears, and soon after the wild sumac opens its large clusters of creamy-white flowers, and both are exceedingly rich in a delicious nectar. The wild mignonette is in bloom during the same period, and the bees never seem to tire of hovering over its perfumed flowers during their short period of bloom.

The golden-rod throws up its brilliant yellow flower spikes in July and August, and continues in blossom until Christmas. It is similar to the plant of the same name growing in the Eastern States, and is one of the most valuable of California's long list of honey-producing plants.

This list includes nearly 200 plants, but many of them bloom for only a short period, every fortnight showing a new combination of colors on the hill-sides. The nectar gathered from all the different flowers is not separated by the bee-master. The aim is only to keep the light, silver-sage honey apart from that of darker color gathered earlier in the season from the alfilerilla

and black sage, and afterward again from the amber honey of the wild buckwheat, sumac and golden-rod.

The process of preventing the mixing of the honey by the bees is very simple, the bee-master watching the season of the different flavors, and taking the honey from the combs as the season progresses.

California liquid honey, as it leaves the bee-master, is always pure. Sugar, glucose, and all other possible adulterations cost more per pound than the pure honey is worth on the ranch.

## TIERING-UP.

### Results of the Season—Doubling Up Swarms.

Written for the American Bee Journal  
BY H. C. GIFFORD.

I will now give a statement of my summer's work and the results. About July 1 my 20 colonies of bees had not 5 pounds of honey to the hive. I have practiced the tiering-up plan, some of them 3 tiers high, making 81 one-pound sections per hive. I have taken off 1,350 pounds of honey, and have about 450 or 500 pounds yet to take off, or about 1,800 pounds from 20 colonies, besides increasing them to 27 colonies. At the present time all are in good condition, and the hives well filled with honey. I have doubled up some swarms, returned some second swarms, and have had no trouble with their coming out the second time.

My bees never did as well as they have since July 5. I have read very many big stories in the BEE JOURNAL, and some of them I rather doubted, so I need not be surprised if some doubt what I may say about one of my new swarms; but it is true, and I think it has been of great benefit to me, for I intend to practice it next summer, if I live.

### Experience with Two Swarms.

About Aug. 5, a large swarm came out, and settled on the grape-vines near the hives. I hived them, but when about three-fourths of them were in the hive, another swarm issued, and came right to the hive where I was working. I let it stay until about one-half of them had settled in my new hive, which I immediately carried to a stand; the rest flew around awhile, and then went back to their old home.

It seemed that all the bees could not get into the hive, so I put 48 sections on top, and they all went in. After awhile I put on 24 more sections, and on Sept. 15, I took off the three tiers, which weighed 78 pounds, and the hive is now full from top to bottom, which cannot be less than 60 pounds, and perhaps 80. This was all stored in about 40 days.

The above statements are facts, and I intend after this to put two swarms together whenever I can. One strong colony is worth three small ones, and is not so much trouble or expense.

My neighbors call me an "expert" in the bee-business, but this summer's

experience teaches me that I am only in my A B C's. What I have learned I have gotten from the AMERICAN BEE JOURNAL. My neighbors have no honey to speak of, except Wm. Johnson, who works by the same method that I do. I sell my honey at the stores, at 18 cents per pound, and I tell them to sell it at 20 cents. I will have no trouble to sell my crop, although some who have a little honey bring it in and sell it for what they can get, which ranges from 12½ to 16 cents per pound.

I send my membership fee for the "Union." It would look selfish to me not to belong to the Bee-Keepers' Union, when I have received so much benefit from the experience of those who do belong to it; but I have such good luck with wintering my bees on the summer stands, that I shall not try the cellar yet. I box up the hives and pack them with straw, leaving an opening in front 6 inches long and 3 inches high, which I can close up at any time. I pack the caps with straw, and cover them well on top to keep them dry.

Morris, Ills., Sept. 24, 1888.

## CLUBBING LIST.

We Club the American Bee Journal for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	Club
The American Bee Journal	.....1 00	.....
and Gleanings in Bee-Culture	.....2 00	.....1 75
Bee-Keepers' Magazine	.....1 50	.....1 40
Bee-Keepers' Guide	.....1 50	.....1 40
Bee-Keepers' Review	.....1 50	.....1 40
The Apiculturist	.....1 75	.....1 60
Canadian Bee Journal	.....2 00	.....1 80
Canadian Honey Producer	.....1 40	.....1 30
The 8 above-named papers	.....5 65	.....5 00
and Cook's Manual	.....2 25	.....2 00
Bees and Honey (Newman)	.....2 00	.....1 75
Binder for Am. Bee Journal	.....1 60	.....1 50
Dzierzon's Bee-Book (cloth)	.....3 00	.....2 00
Root's A B C of Bee-Culture	.....2 25	.....2 10
Farmer's Account Book	.....4 00	.....2 20
Western World Guide	.....1 50	.....1 30
Heddon's book, "Success"	.....1 50	.....1 40
A Year Among the Bees	.....1 75	.....1 50
Convention Hand-Book	.....1 50	.....1 30
Weekly Inter-Ocean	.....2 00	.....1 75
Iowa Homestead	.....2 00	.....1 90
How to Propagate Fruit	.....1 50	.....1 25
History of National Society	.....1 50	.....1 25

**Can You Do Anything** that will do more to advance and defend the pursuit of bee-keeping, than to aid its Weekly Exponent and Defender? The AMERICAN BEE JOURNAL is the pioneer bee-paper of America, and is fully entitled to the active support of every progressive apiarist, for it works constantly and faithfully for the best interests of the pursuit. We therefore specially request all our readers to use their influence to double our subscription list during the coming autumn. Reader, will you please send us a new subscription with your renewal or before that time? A good weekly at one dollar a year is surely cheap enough to command patronage.





ALFRED H. NEWMAN,  
BUSINESS MANAGER.

## Business Notices.

**If You Live** near one post-office and get your mail at another, be sure to give the address that we have on our list.

**Hilton's** new pamphlet on Comb Honey Production has been reduced in price to 5 cents. For sale at this office.

**If you Lose Money** by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

**Paper Boxes**—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections  $4\frac{1}{4} \times 4\frac{1}{4}$  and  $5\frac{1}{4} \times 5\frac{1}{4}$ . Price, \$1.00 per 100, or \$8.50 per 1,000.

**Preserve Your Papers** for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

**Yucca Brushes**, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

**Please write American Bee Journal** on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

**Pure Phenol for Foul Brood.**—Calvert's No. 1 phenol, mentioned in *Cheshire's* pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must be sent by express.

**Apiary Register.**—All who intend to be systematic in their work in the apiary, should get a copy of the *Apiary Register* and begin to use it. The prices are as follows:

For 50 colonies (120 pages).....\$1 00  
" 100 colonies (220 pages).....1 25  
" 200 colonies (420 pages).....1 50

**Photographs of Bee-Keepers.**—The "medley" gotten up by E. O. Tuttle, containing the faces of 131 representative apiarists, and a printed sketch of each one, will be sent with the BEE JOURNAL for one year for \$1.75; or we will present it free, by mail, to any one, for a club of three subscribers and \$3.00.

**Hastings' Perfection Feeder.**—This excellent Feeder will hold 2 quarts and the letting down of the feed is regulated by a thumb-screw. The cap screws securely on. It is easy to regulate—either a spoonful or a quart—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for \$3.50, and it can be obtained at this office. Postage 10 cents extra.

**Red Labels for Pails.**—We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, \$1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels.....	\$1.50	\$2.00	\$2.25
500 Labels.....	2.00	3.00	3.50
1,000 Labels.....	3.00	4.00	5.00

Samples mailed free, upon application.

**The Convention.**—The pamphlet containing the report of the proceedings of the Union Convention in Chicago, Ills., is published, and can be obtained at this office for 25 cents. Or bound up with the history of the International Society, and a full report of the Detroit and Indianapolis conventions, for 50 cents, postpaid.

**Clover Seeds.**—We are selling *Alsike Clover Seed* at the following prices: \$8.00 per bushel; \$2.25 per peck; 25 cents per lb. *White Clover Seed*: \$10.00 per bushel; \$2.75 per peck; 30 cents per lb. *Sweet, or Melilot, Clover Seed*: \$6.00 per bushel; \$1.75 per peck; 20 cents per lb.—by express or freight.

**Cork for Winter Packing.**—Its advantages are that it never becomes *musty*, and it is *odorless*. Cushions can be made of cloth and filled with the cork, for winter packing. We can supply all orders now at 10 cents per pound. Or a seamless sack of it, containing 15 pounds, for \$1.00.

**Exchange.**—We will accept Honey and Beeswax in exchange for Bee-Keepers' Supplies in any quantity. Those desiring to make a trade are invited to correspond with us, stating quantity, quality, and price, and the goods they want in exchange.

**Alfalfa Clover.**—For habits and cultivation of this honey-plant, see page 245. We supply the seed at the following prices: —Per lb., 22c.; per peck, \$3.00; per half-bushel, \$5.50; per bushel of 60 lb., \$10.00. If wanted by mail, add 10 cents per pound for bag and postage.

## Honey and Beeswax Market.

### CHICAGO.

**HONEY.**—New crop arriving slowly, but demand is limited. White clover comb, 17@18c. Extracted, 7@9c.

**BEESWAX.**—22c. S. T. FISH & CO., 189 S. Water St. Sep. 12.

### CHICAGO.

**HONEY.**—For white comb 1-lb., 18c. Very little inquiry for anything outside of 1-lb., and when it is wanted it is at a lower price. Extracted, the best grades, 7@8c., and some held higher. Offerings are small and demand slow.

**BEESWAX.**—22c. R. A. BURNETT, 161 South Water St. Sep. 12.

### DENVER.

**HONEY.**—Colorado, new 1-lb. sections, 13@15c. Extracted, 7@8c.

**BEESWAX.**—20@23c. J. M. CLARK & CO., 1409 Fifteenth St. Sep. 7.

### NEW YORK.

**HONEY.**—We quote: Fancy white 1-lb., 15@17c.; 2-lb., 14@16c. Fair white 1-lb., 14@16c.; 2-lb., 13@15c. Extracted, white sage, 7@7½c.; amber, 7½@7¾. Demand good and prices firm. New comb honey is arriving quite freely.

**BEESWAX.**—23½c. THURBER, WHYLAND & CO. Sep. 17.

### NEW YORK.

**HONEY.**—We quote: Fancy white 1-lb., 17@18c.; 2-lb., 13@14c. Fair white 1-lb., 15@16c.; 2-lb., 12c. Buckwheat 1-lb., 11@12c.; 2-lb., 10@11c. White extracted, 7½@8½c.; buckwheat, 5½@6½c.; California extracted, white sage, 7½@7¾c.; amber, 7¼@7½. Demand good and prices firm. New comb honey is arriving quite freely.

**BEESWAX.**—22@23½c. HILDRETH BROS. & SEGELKEN, 26 & 30 W. Broadway, near Duane St. Sep. 26.

### SAN FRANCISCO.

**HONEY.**—White 1-lb. sections, 11@12½c.; 2-lb., 12½@1 c.; amber, 8@10c. Extracted, white, 5½@6c.; light amber, 5¼@5½c.; amber and candied, 4½@5c. Receipts light and market firm for best qualities.

**BEESWAX.**—Dull at 19@22½c. O. B. SMITH & CO., 423 Front St. Sep. 22.

### DETROIT.

**HONEY.**—Best white comb, 17@18c.; dark, 16c.—Extracted, 8@10c. Market bare of all kinds.

**BEESWAX.**—21@22c. M. H. HUNT, Bell Branch, Mich. Sep. 24.

### CINCINNATI.

**HONEY.**—We quote extracted at 4½@8c. per lb. Comb honey, 12@16c. Demand slow.

**BEESWAX.**—Demand is good—20@22c. per lb. for good to choice yellow, on arrival.

Sep. 18. C. F. MUTH & SON, Freeman & Central Av.

### KANSAS CITY.

**HONEY.**—Choice 1-lb. sections, 18c.; dark 1-lb., 14c.; 2-lb., 16c.; dark, 13c. White extracted in 60-lb. cans, 8c.; amber, 7c.; in barrels and kegs, 6@8c. Demand good, prices firm, and stock light.

**BEESWAX.**—None in market.

Aug. 29. HAMLIN & BEARSE, 514 Walnut St.

### NEW YORK.

**HONEY.**—We quote: Fancy white 1-lb. sections, 17½@18c.; 2-lb., 14@15c. Fair 1-lb., 14½@15½c.; 2-lb., 11@12c. Extracted, fancy white clover, 7½@¾. California white in 60-lb. cans, 8c.; light amber, in same cans, 7½c.; amber, 7¼c. Buckwheat in kegs and barrels, 5½@6. Cuban, in barrels and ¼-barrels, 65c. per gallon.

Sep. 26. F. G. STROHMMEYER & CO., 122 Water St.

### BOSTON.

**HONEY.**—We quote: New 1-lb. sections, 18@20c.; 2-lb., 14@16c. New extracted, 8@10c.

**BEESWAX.**—25 cts. per lb.

Aug. 24. BLAKE & RIPLEY, 57 Chatham Street.

### KANSAS CITY.

**HONEY.**—We quote: New white 1-lb., 18c.; light 1-lb., 16c. California white 1-lb., 18c.; light 1-lb., 16c.; white 2-lb., 16c.; light 2-lb., 14c. Extracted, white, 8c.; amber, 7c.

**BEESWAX.**—18@20c. Sep. 5. CLEMONS, CLOON & CO., cor 4th & Walnut.

### ST. LOUIS.

**HONEY.**—We quote: Extracted, 4½@5½c.; if in cans, 8@9c. White clover comb, 14@15c. Market is steady and receipts light.

**BEESWAX.**—21c. for prime.

Sep. 8. D. G. TUTT & CO., Commercial St.

### MILWAUKEE.

**HONEY.**—New white 1-lb. sections, 18c., and very fine, 20c.; 1-lb., 15@18c.; old 2 and 3 lbs., not salable, 12½@14c.; dark 1-lb., old or new, 12@13c. Extracted, new white in kegs and ¼-barrels, 8@9c.; old, in same packages, 7@8c.; in tin, 8@9c.; dark in barrels or ¼-barrels, 6@6½c. Arrivals of new crop small; demand not urgent, and only very moderate trade.

**BEESWAX.**—22@25c. A. V. BISHOP, 142 W. Water St. Aug. 31.

**Conventions.**—The time for holding Bee-Keepers' Conventions has now arrived, and we cannot give any better advice than this: Let each one attend who can do so, and take part in making these meetings interesting and instructive. If you have not already obtained the "Bee-Keeper's Convention Hand-Book," do so at once to post yourself up on how to conduct such meetings correctly. It contains a simple Manual of Parliamentary Law and Rules of Order for the guidance of officers and members of Local Conventions—Model Constitution and By-Laws for a Local Society—Programme for a Convention, with Subjects for Discussion—List of Premiums for Fairs, etc. Bound in cloth, and suitable for the pocket. Price, 50 cents. We will club this book and the AMERICAN BEE JOURNAL for one year for \$1.25. It also contains a lot of blank leaves on which you can note important matters as they come up. Do not fail to send for a copy of it.

**Simmins' Non-Swarming System.**—We have a few of these books left, and we will club them with the AMERICAN BEE JOURNAL for one year, both postpaid, for \$1.25. The subscription to the BEE JOURNAL can be for next year, this year, or may begin anew at any time.

**We Have** some copies of the old edition of Cook's Manual left, which we will sell at the old price, \$1.25. The price of the new edition is \$1.50 per copy; a notice of which may be found on page 579.

**Queens.**—We can mail a Tested Italian Queen (bred for the best results as well as for beauty) for \$2.00; Untested Queens \$1.00 each, or \$9.00 per dozen. Orders solicited.

**The Latest catalogue** for this year is that of T. S. Sanford, New Castle, Pa. It has 4 pages, and includes bees and supplies.

**Dr. Miller's Book,** "A Year Among the Bees," and the AMERICAN BEE JOURNAL for one year—we send both for \$1.50.

**New Subscribers** can obtain the full numbers for 1887 and 1888, for \$1.75, while there are any sets of 1887 left.

## Advertisements.

**BEES to Give Away.**—75 Colonies of hybrid Bees in Langstroth hives. Plenty of honey for winter. Will sell the lot for what the hives and honey are worth. Address,

I. W. ROLLINS, Elgin, Wabasha Co., Minn.  
Mention the American Bee Journal.

**Pure Italian Bees,**  
ONLY \$3.00 per Colony QUEENS, \$1.00.  
Address, S. F. REED,  
39A3t NORTH DORCHESTER, N. H.  
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## CARNIOLAN

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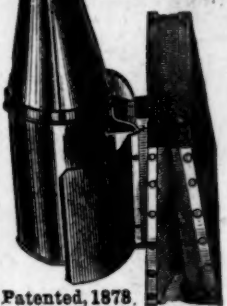
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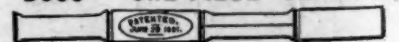
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